THE VETERINARY RECORD

A Weekly Journal for the Profession.

FOUNDED BY WILLIAM HUNTING, F.R.C.V.S.

No. 1402 MAY 22, 1915. VOL. XXVII.

A SIGN OF THE TIMES.

Early in this century, when the general employment of veterinary surgeons in meat and dairy inspection was still much more a future probability than an established fact, the attitude of the profession towards it was not altogether satisfactory. We were willing and anxious to undertake the work—indeed, we were never tired of insisting that veterinary surgeons were the only men fit to be entrusted with it. But there was little to indicate that, as a body, we had realised that the work itself demanded knowledge and presented problems beyond the scope of general practice, and were fitting ourselves to cope with its special difficulties. The few men then engaged in public health work were generally silent regarding its details; and, on the surface at least, there was not much evidence that the bulk of the profession took any great scientific interest in the subject. It might almost have been said that most of us seemed to regard meat and dairy inspection more as sources of employment than as special studies.

Gradually matters have changed—for a variety of reasons. One was an inception of post-graduate courses. Another was the appeal which the obviously growing public employment of veterinary surgeons made to the good sense of the profession; and the third was the personal influence of a few men. A fourth—and not the least important—was the appearance of the Tuberculosis Order, and the new responsibilities it cast upon many country practitioners. As a result, we have now ample evidence that both the veterinary surgeons actually engaged in public health work, and the larger number whose indirect connection with it is increasing, are fully awake to the importance of its scientific side. A piece of such evidence was supplied by the paper recently read by Mr. A. D. Morgan on "The Value of Veterinary Inspection in the Detection of Tubercular Mastitis," which we printed last week. A dozen years ago, a paper with such a title would probably have mainly consisted of assertions of the claims of the veterinary surgeon to employment—with not much adduced to prove the author's contentions beyond mere assertion. But the present essay was almost wholly a scientific exposition of difficulties of the subject—a paper lending itself to a purely professional discussion—which it received. Paper and discussion alike may well be taken as signs of the times.

Every year, the number of such papers is increasing. Every year, also, the discussions upon them show that the general practitioner's standard of knowledge in these special subjects is rapidly rising. Both are good signs, especially the last. They show that we are now studying these subjects in earnest, which many of us were not doing even a decade ago.

THE FUTURE OF HORSE PRACTICE.

It requires a good deal of courage to controvert the dictum which may emanate from the editorial sanctum, but in spite of the risk I will endeavour to answer the note in the current number of *The Record*, *re* the decay of horse practice in consequence of his being displaced by the motor.

Your jeremiad carries me back to a matter of 50 or 60 years ago, when I remember my grandfather telling of the same fear in consequence of the coming of the railway. Also, 30 years ago a large jobmaster was bewailing the same thing to me in view of the extensive introduction of the bicycle.

You are no doubt acquainted with the returns of the Board of Agriculture, and that previous to the war those returns showed but comparatively small reductions in the numbers of horses, and those mainly in the youngest ages. I admit that even this is to be regretted, but I am sure that it is the result of reports and expression of similar opinions to those used in the paragraph I am criticising, which have frightened farmers and led them to abstain from breeding. The effect has been to increase the scarcity—and consequently raise the price of horses to a very considerable extent before the war began, and since that to make them almost unobtainable.

Is it not a fact that when a stud of horses, say, from converted tramways, was disposed of that the prices were almost invariably high? Where, then, do those horses go except into other spheres of usefulness?

That the horse population has been transferred to other districts is undoubtedly a fact. Passenger traffic, in towns especially, can be carried on better by mechanical means than by horses, and even the veterinary surgeon finds it necessary to use a motor so as to cover his ground quicker than by the horse. This is a gain also to the owners of patients, for it enables us to pay more frequent visits, with corresponding benefit to patient and satisfaction to owner, when the seriousness of the case makes such extra attendance necessary or desirable.

For commercial transport, no doubt the motor has become absolutely necessary: it has not, on the whole in any sense displaced horse labour, but only transferred it.

If it were not for mechanical appliances it would be impossible to carry on the trade of the country. Any increase in trade, both internal and export, makes a corresponding demand on the means of transport, since both raw material and manufactured goods must be taken to and from ships, warehouses, shops, railways, and to the consumer. And when the enormous increase in the trade of this

country during the development of railways up to the present time is considered, it becomes very apparent that previously existing means of what may be called supplementary transport would be quite inadequate to cope with the demand.

Undoubtedly the transference of horses from towns to country has reduced the demand for veterinary services in towns very seriously, but it has increased the demand in the country to a considerable extent, and with the increased value of horses, and at the same time, that of animals for consumption which has also taken place, there is no doubt whatever that the future of the profession in country districts was never brighter.

The question of horse breeding is a difficult one.

There are two distinct stages in the life of a horse, and very few farmers have the means to develop both with success. First there is the production of the foal and his maintenance up to being weaned; and secondly, there is his growth and management afterwards until he is able to work and earn his living.

Almost every farmer is able to breed the foal, but comparatively few have the opportunity, or even the ability, to train anything except the heavy breeds, which come to work early and require less management than lighter breeds.

My remedy would be that Government should undertake the keeping of lighter horses, such as hackney, charger, cavalry and similar animals. There is no need for Government to *breed* colts—if a market is provided there will be a supply at once. It is the training which is the difficulty. Many promising animals go wrong and are reduced in usefulness and value simply through not being looked after while growing. The State has an abundance of suitable labour for the purpose in the men of the cavalry regiments, who in time of peace would welcome such a useful and interesting occupation. Farms of suitable land can be had all over the country, and, when the horses are ready for sale, there is without doubt a profitable market in the public demand. The animals can be sold if necessary under an undertaking to give the State the first call on their services in emergency.

It is suggested in your note that it is doubtful whether many of the horses sent abroad will ever return. I think we shall find that every female, at least, will return, and in all probability those males also which remain fit for work, for their value here will undoubtedly warrant the cost.

From a long personal experience in agricultural practice, with some town thrown in, I am assured that we need not be downhearted.

STEPHEN BEESON.

Hereford, May 17.

A Goat belonging to Mr. P. J. Carroll, Bailieborough, Co. Cavan, Ireland, received an injury to the left fore leg, necessitating its amputation, which operation was successfully performed by Mr. P. G. Connolly, F.R.C.V.S. (*See plate*).

CONGENITAL ABNORMAL KIDNEYS OF AN UNBORN FOAL.

Perhaps the following, and I should say unique case, may interest some of your readers.

On Sunday morning, April 25th, we were called to assist an aged Clydesdale mare at her foaling. My son Charles attended to the case; on his arrival he found the mare lying on the ground in a pasture field, with the head, fore legs and shoulders of the fœtus pulled well outside, and ropes attached at which eight strong men had been tugging for some time, but could not effect delivery. After examining and twisting the fœtus, my son cut into the chest of the foal and through diaphragm, when a quantity of water escaped, with no further result. He then cut through the costal cartilages on each side of the sternum, removing the latter, and then removing the thoracic and abdominal viscera. Traction was again tried, but no progress. On exploring the abdominal cavity of the foal, he came across two large tumours; thinking they were cystic, he cut into them in several parts, from which a quantity of fluid escaped, but even then delivery could not be accomplished. He next cut and tore away the tumours, when the remains of the fœtus came away practically of its own accord. The tumours were enlarged kidneys of a cystic character, and together weighed 26 lbs. I send you photo. of the abnormal growths: had the fluid been left in the tumours, they would have scaled about four stones.

HENRY THOMPSON, M.R.C.V.S.

Aspatria, May 12.

SOUTH AFRICAN VETERINARY CORPS.

"Enclosed is a photograph of the O.C. and N.C.O.'s of E Mobile Section of S.A.V. Corps, one of the many Veterinary Sections taking part in operations against German South West Africa. There are now about 35 Veterinary Officers on active service with the Union Forces and under the Directorship of Lt.-Col. J. Irvine Smith. The enclosed was taken whilst "on trek" to the fore front. Sgt. Appleton is a son of Col. Appleton, A.V.C."

ABSTRACTS FROM FOREIGN JOURNALS

ŒSOPHAGOSTOMOSIS IN CATTLE IN MOROCCO.

Venu describes a bovine epidemic which he observed during an excursion in Morocco (*Recueil de Méd. Vét.*). The outbreak was seen in cattle at pasture; and, though its geographical area was comparatively small, its mortality—which reached 25 per cent.—was rather high.

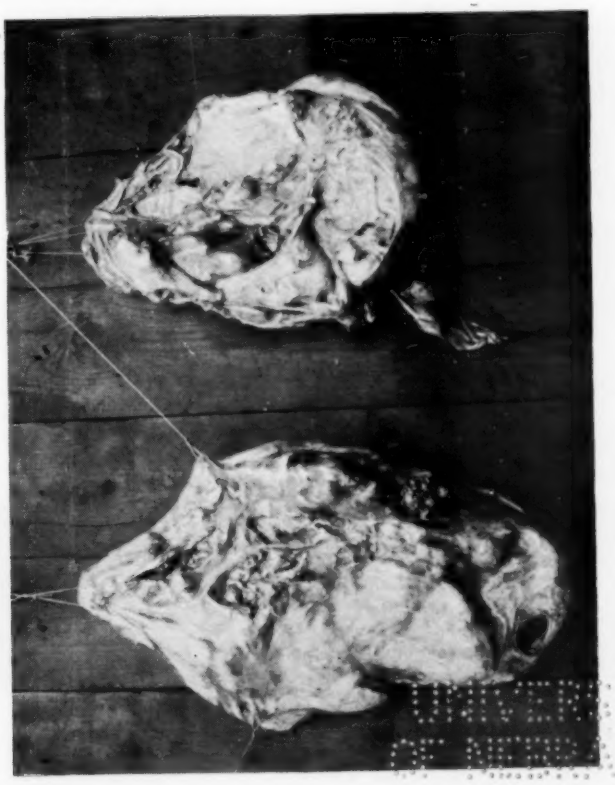
The disease appeared as an anæmia of more or less rapid course, accelerated by poor conditions of pasture and by lack of water. Usually its course was from four to ten days. A few animals resisted longer, and recovered a little, but succumbed at the end of a month. The anæmia, which is a symptom

Photo J. A. Coleman, The Studio, Bailieborough.

CONGENITAL CYSTIC KIDNEYS
IN AN UNBORN FOAL.

S.A. VETERINARY CORPS, E MOBILE SECTION.

Capt. W. A. Dykins, O.C. Sgt.-Maj. Byng.
Corpl. John. Sgt. Appleton. Corpl. O'Reilly.



common to many diseases, is pathognomic for this one by reason of its severity. The appetite is not lost.

At the beginning of the disease there is also diarrhœa, which is often sanguinolent. The fæces are mucous in character, and contain abundant worms. The mucous membranes are pallid, and the pulse is weak. The temperature reaches 104° F. In the last stages, the most prominent symptom of the disease is the œdema which is characteristic of all anæmias.

Venu saw post-mortem examinations of two animals, of which one had died and the other had been slaughtered. There was very severe enteritis, especially in the posterior portions of the intestine. The kidneys were congested; the liver and spleen were normal.

The lungs showed limited centres of commencing lobar pneumonia. There were numerous worms in the fæces. No parasites were found in the spleen, lungs, and blood; and the blood, when inoculated into a rabbit, gave no reaction. The worms found in the intestine were found to be œsophagostomes; and they were classified as *Œsophagostomum radiatum* though not with absolute certainty, on account of the small number of intact specimens that could be examined.

The disease is therefore a pernicious anæmia due to œsophagostomes. Its prognosis is grave, and all curative treatment is useless. Prophylaxis follows ordinary lines—drainage of marshy pastures, dressing the land with chemicals, disinfecting litter, etc., with lime, and the preservation of healthy animals from contact with infected ones.—(*La Clinica Veterinaria*).

Supra-renal preparations in the treatment of Milk Fever.

R. Metzger, of Säckinger, some time since recorded the following three cases of milk fever. The first two cases were very severe ones in fat cows. When first seen, the animals were already lying flat on their sides, and showed subnormal temperatures, rattling and irregular breathing, and loss of the conjunctival reaction. In both these cases, Metzger insufflated the udder with air, and at the same time gave a subcutaneous injection of 5 c.c. of a 1 in 1000 solution of adrenalin.

The results were striking. In both cases the recoveries were much more rapid than Metzger had been accustomed to see when using air-insufflation alone. Both cows showed a rise of the rectal temperature in from ten to fifteen minutes after the beginning of the treatment. One rose after half-an-hour without assistance. The other, after half-an-hour, assumed the normal recumbent position with her head raised, and stood up after an hour.

The third case was a cow which had been affected for some hours. When seen, she was in the typical recumbent position, with the head thrown back to the side. The conjunctival reaction was still present in some degree. The rectal temperature was 99.5° F. This cow received 5 c.c. of a synthetic supra-renal preparation subcutaneously; but *no* udder treatment was adopted. After a quarter of an hour the head, which previously, after being lifted, had fallen helplessly to the ground, could be held up to some extent. Metzger again injected the same dose. Substantial improvement now appeared very rapidly; and, after another half-hour, the cow rose and looked for food.

In recording these cases, Metzger suggests that the injection of supra-renal preparations may prove to be a still more rapid and certain method of treatment than insufflation of the udder, and that it may ultimately supersede the latter with advantage.—(*Berliner Tier Woch.*)

Notes upon Periodic Ophthalmia.

Johann Loidoit, who, in the course of seventeen years' experience, has had opportunities of examining the eyes of foals and other equines from nearly all the studs of Hungary and Galicia, has published some of his observations upon periodic ophthalmia and its causes and treatment (*Œsterr. Wochenschr. f. Tierheilk.*)

In one stud which yielded from eight to ten foals annually, one or two became affected with periodic ophalmia every year. All these affected animals were begotten by one stallion, which showed a considerable opacity of the lens and liquefaction of the vitreous humour of the right eye. A striking point was that all the affected young animals were affected upon the right eye alone. Other foals, begotten by a second stallion which was healthy, in no case showed periodic ophthalmia. Loidoit has made similar observations in other studs, and therefore is firmly of opinion that hereditary predisposition plays a part in the causation of periodic ophthalmia.

He regards it, however, as quite beyond doubt that infection is a still more important etiological factor. In support of this statement he cites the following example. Within a space of six days, thirty-eight remount horses in one establishment became affected with internal ophthalmia, and in the following days two foals and two farm horses also became affected. About three weeks before, the thatched roof of a building containing hay had been damaged by a storm; and the dust from the roof had been mingled in considerable quantity with the hay. About a fortnight later—a week before the appearance of ophthalmia—many of the young animals, which had meanwhile been fed upon this dusty hay, showed a considerable nasal discharge and coughed a great deal. From this case, and other similar observations, Loidoit concludes that infection is a factor.

As regards the therapeutics of the disease, Loidoit strongly advises supplementing local treatment with the internal administration of iodine compounds. Usually he gives iodide of potassium in doses of 5 grammes (= about 1¼ drachms) three times daily for a period of some weeks. He admits that iodine preparations are not a specific for this disease, but nevertheless holds that they are valuable, as they powerfully aid the resorption of inflammatory products.—(*Berliner Tier. Woch.*)

W. R. C.

NORTH MIDLAND VETERINARY MEDICAL ASSOCIATION.

[National V.M.A.—Northern Branch.]

CASTRATION BY THE STANDING OPERATION.

Mr. W. Collinson, M.R.C.V.S., Anston.

Mr. President and Gentlemen,—Now that the season for castration is here, I thought a few notes on the standing operation might be acceptable, and prove instructive by eliciting the personal experiences under the different methods employed by the gentlemen present at this meeting. In spite of all that has been said about the standing operation, it is my opinion that it is far and away the best, being quicker and less dangerous to all concerned.

I do not propose to bring anything new to your notice, but simply to describe the method I follow and success of same.

All that is required for the operation is a twitch about three feet long (if longer it is apt to get in the way of the operator), a good sharp castration knife, and an Ecraseur with a blunt chain.

Assistants required: man to hold twitch and a boy to hold instruments (who should first wash his hands in some good antiseptic). If possible, arrange for colts to be haltered a day or two beforehand, leaving halters on with shanks tied up.

If colt has not been haltered, let it be done as quickly and quietly as possible, in box where you are going to operate. If colts are knocked about they commence to sweat, and it makes it very much harder to retain a hold on the scrotum and so prolongs the operation. As soon as the colt is haltered, put on twitch and get to work at once. Instruct the man holding the twitch not to try and restrain colt's movements too much, but to pull his head towards him and let colt move backwards or forwards as he wishes. While the colt is being haltered, get your coat off, roll up your sleeves and well wash hands and arms in antiseptic, give the boy the knife and ecraseur with its chain ready looped for use.

Place colt with his off side against a wall in loose box. Stand on near side with back towards shoulder. Examine the scrotum for hernia, etc.; if all right, wash the scrotum and inside of thighs with antiseptic I paint the seat of operation with 1-500 perchloride in spirit, and wash the thighs, etc., when finished.

Method. Pass left hand quietly under abdomen and up to scrotum, grasp off side testicle between thumb and first two fingers of left hand. See that you get a good grip and that the scrotum is as tight as possible over the testicle, otherwise it is apt to roll under the knife when cutting, and so require two or three attempts. Make one good bold incision, and in nine cases out of ten this is all that is required. Give boy the knife and take the ecraseur, pass the loop over the testicle and clear of the epididymis, screw quickly until chain is tight on cord, then as slowly as possible, until chain is drawn to full extent; pass hand up and remove testicle with slight traction. If the chain will not come away, unscrew a little. Proceed in exactly the same manner with near side. Pull the scrotum down and see that the cords are returned into operation wounds. Wash the scrotum and inside of thighs with antiseptic. Take off twitch, and give a little fodder to distract his attention. Tell the owner to get him out as much as possible after the first 24 hours.

I have operated on animals from 1 to 16 years old in this manner, of all breeds, and with the best results.

Some colts are rather inclined to lie towards the operator during removal of testicle, but I find that if you do not push at them or allow anyone else to do so, they will usually keep on their feet. Should they lie down, loose the ecraseur and let it hang on cord, make colt get up, and proceed with operation.

After effects. Some colts swell much more than others. If any considerable swelling, scarify prepuce, open operation wounds and insert 1od. c. salol pessary up each wound. I have found this act extremely well. The pessary melts slowly and the antiseptic is thus kept in contact with the wound for some considerable time.

I have never had a serious case of hæmorrhage with this method, at least nothing that has not answered to hypodermic injection of Adrenalin (atropine?)

I have not had a scrotal hernia I could not detect before operation, and in these cases I have cast and done covered operation.

In two or three colts I have had omentum come down. In such cases stretch, suture (aseptic catcut), cut off below and return. The reason I adopted this method was that with the clamp I had three cases of schirrous cord—and that in my first dozen colts. A second journey is necessary to remove clamps, and I remember one case where the clamps were left on a week.

All the advice I can give any gentleman wishing to do the standing operation is, if possible, see one done by a veterinary surgeon, then let your first dozen be cart colts, and do them all in one day. You will be surprised how easy it is (after your first half dozen) and how quietly colts stand. Do not get flurried. The cooler the operator, the cooler will be his assistants, not to mention the colt. Keep the knife sharp and make a bold incision. Have the ecraseur chain blunt and wind through cord slowly.

A demonstration would have been much better, but I am afraid the number of gentlemen present would have made it difficult to see properly. I shall be pleased to show any member of this Association my method at any time, if he anticipates taking up the standing operation.

The following gentlemen took part in the discussion:—the President, Messrs. Somerset, Furness, Smith, Fletcher and Sampson.

The discussion generally dealt with the following matters:—

Expedition in carrying out the operation when standing as against a recumbent position. The amount of hæmorrhage when the operation is performed by means of the ecraseur in opposition to the wooden clams and the actual cautery. The liability to fall of the intestines, and mesentery due to rupture; and, the injury likely to occur to the operator by the standing operation *v.* the injury to the animal by casting.

A vote of thanks to Mr. Collinson was carried on the proposal of the Hon. Secretary, seconded by Mr. Green.

It was then decided to postpone the paper by Mr. Green, on "Eczema in the Dog," to the next meeting.

The President was heartily thanked for his presence in the Chair, on the proposal of Mr. Sampson, seconded by Mr. Somerset. J. S. Lloyd, Hon. Secretary.

Shires at the Front.

An officer in the A.S.C. at the front has stated that Shire horses are doing fine work at the front. The motor-lorries do not go right up to the front, and the shells on the last stage of their journey from the coast to the artillery fighting line have to be dragged up to the guns by Shire horses. A couple of the biggest shells make a decent single load. The A.S.C. takes great care of their Shires, and it is not mere cynicism to say that the loss of one of them is, in a military sense, worse than the loss of a human life.

In the middle ages, at Crecy and other battles, the ancestors of the present Shire horses were the chargers who carried the knights in armour in battle.—*Sunday Chronicle.*

NEW THEORIES AND INVESTIGATIONS CONCERNING PELLAGRA. By ALBERTO CENCELLI, Senator; President of the Pellagra Commission of Rome.

[The following extracts from a long article, specially translated for *The Lancet*, are suggestive. More than one disease in the southern hemisphere have been attributed to telluric causes, but in none has the connection been demonstrated so fully. Probably further confirmation will be required before the results are finally accepted; but hitherto the etiology of Pellagra has remained as great a mystery as that of malarial disease a quarter of a century ago, and it seems that this investigation will add one more chapter to what may well be called the romance of medicine.]

Until comparatively recently, maize was generally considered to be the cause of Pellagra, and it was thought from the investigations first of Sette and Balardi, and subsequently of Lombroso and his school, that it was probably due to (1) the insufficient nutritive value of this cereal; (2) toxic substances found in sound or in spoilt maize; (3) special toxins produced by certain moulds which develop in maize under particular conditions; (4) the increase in virulence of Bacillus coli in the intestine attributable to a maize diet, although the corn is in good condition; (5) the action of definite pathogenic agents introduced into the organism at the time of the ingestion of the maize. But the very numerous facts recorded by many scientists in Italy and other countries who have studied the question have proved that maize can no longer be regarded as the sole and specific cause of the disease.

Briefly summarised, the facts are as follows: There are many sufferers from pellagra who have *never* lived on maize; entire districts in Italy (Molise, Campania, Basilicata, Calabria, Liguria) and abroad (Brazil) where good, mediocre, and bad maize are used to an extraordinary degree, in fact almost exclusively, are free from the disease, while in some provinces and communes where pellagra is common, immune zones exist, the latter being clearly marked off from the infected areas, although the climatic, economic, hygienic, and dietetic conditions are identical, and maize is the staple article of food. In a family where the members must more or less have inherited the same tendencies, and are subject to similar hygienic and dietetic conditions and to the effects of equally excessive toil, one or two (rarely more) sicken.

An English commission, with Dr. L. W. Sambon at the head, which has made a special investigation of pellagra also in Italy, has decided that there is no connexion whatever between maize and pellagra, and has put forward the hypothesis that the disease must be attributed to a parasitic protozoon which is probably transmitted and propagated by a species of mosquito (similium) existing in the drinking water.

Professor Giulio Alessandrini, of the University of Rome, by means of a series of observations in almost all the pellagra districts of Italy* has, he believes, established that this malady owes its origin to an exactly localised *quid* found in drinking water, and only in such waters as arise in or traverse, or are stagnant on, argillaceous soil. Professor Alessandrini has been led to this conclusion from the observation of the following facts: (1) The entire absence of pellagra where clear running water is drunk; (2) the presence of the disease where stagnant water is used or that from ditches or wells in the superficial stratum; (3) the gradual, slow disappearance of the disease where drainage operations are gradually and slowly carried out; (4) the rapid disappearance of the malady where aqueducts are made or where many artesian or other deep wells are sunk at the same time, or where the existing bad wells are put into good condition; (5) the obstinate persistence and even progressive increase of the complaint when nothing has been done as regards the drinking water; (6) the restriction of pellagra in those districts where the water is good, to such persons as have, through emigration, contracted the disease where it is unwholesome; (6) the greater and almost exclusive occurrence of pellagra in country districts, especially in those which are the most thickly populated, and where nothing is done to improve the condition of the water for drinking purposes.

These investigations of Alessandrini having become known, I thought it well in June, 1912, that the Pellagra Commission of the Province of Rome, of which I have the honour to be President, should request Professor Alessandrini (who is a member of the said commission), together with Professor Giannelli and Professor Filena, to make an inquiry in our province for the purpose of ascertaining the condition of the endemic disease of pellagra in Lazio.

It appeared to me and to the Pellagra Commission of Rome that these preliminary studies and experiments carried out by Professor Alessandrini (with whom was subsequently associated Professor Alberto Scala, who attended to the chemical side of the question) were of great scientific importance. Therefore I did not hesitate to propose to our Commission that the necessary means should be placed at the disposal of the two investigators for the extension of their researches and studies and their experiments on animals. The Commission approved of this suggestion. In May, 1913, Alessandrini and Scala gave a verbal report of the latest results of their labours and the conclusions they considered could be drawn from them. Now they have published a detailed monograph, "Contributo nuovo alla Etiologia e Patogenesi della Pellagra," 1914†, in which they give an account of their experiments on man and animals and discuss the definite conclusions they have reached.

The following are the exact words in which the two eminent scientists have recorded their results:—

1. Silica in a colloidal condition and in a gelatinous condition produces chronic poisoning in guinea-pigs, rabbits, dogs and monkeys when administered by means of subcutaneous or intraperitoneal injections, or when introduced into the mouth. 2. The electrolytes with which the silica comes in contact before entering the circulation have a great effect upon its toxic action, for which reason colloidal compounds or compounds of superficial absorption are made which may be more or less harmful than silica alone, or perfectly innocuous, as in the case of carbonate of calcium. 3. The action of alumina is similar to that of silica, at all events on guinea-pigs and rabbits, and thus increases the effect of the former substance, whether it unites with it in the form of a colloid mixture or whether it is merely in suspension in the water and separate from the silica. 4. The water of the pellagra zones of the Gualdo Tadino district (a subdivision of Grello and Morano) containing argillaceous matter in suspension, when mixed with bran and administered through the mouth to guinea-pigs and rabbits and as a drink to monkeys, produces the same silica poisoning. 5. The feeding on maize-flour and grass of animals subjected to the action of silica in no wise increases the toxic action, except in such cases where the maize introduces poisonous silica, or any other injurious substance. 6. The silica is the cause of the retention of the salts and gives rise, first to an excessive fixing of mineral salts in the tissues and later to the excessive liberation of mineral acids which produce the anatomico-pathological lesions already

* La Pellagra in Italia. Observazione epidemiologiche, Annal d'Igene sperimentale, Roma, 1910.

† Typografia Nazionale Bertero, Rome, pp. 176 and 8 coloured plates.

recorded. 7. The effects of this toxic action are counteracted by intramuscular or subcutaneous injections of solutions of neutral citrate of sodium as an alkalising agent. 8. The complex of toxic symptoms produced by the silica in animals is most similar to, if not identical with, that of human pellagra. 9. Human pellagra is an acidosis, as has already been demonstrated, and is proved by the fact that patients suffering from this disease are cured, or their condition is greatly improved, by the use of neutral citrate of sodium; that is to say, they are cured when the malady is of relatively recent date or when the free mineral acids have not caused irremediable lesions, as must occur in toxic action of long standing. 10. In animals rapid poisoning can occur, which, however, introduces no new features. The same is also the case in acute human pellagra.

The new and important point which has just been established is that the cause of the disease appears to be a chronic poisoning brought about by the silica in colloidal solution in waters of determined composition; in other words, pellagra seems attributable to mineral colloids. According to the authors, the clay is the first cause of the evil, for the rain-water present, either in the superficial or the deep strata of the ground, reacts upon the the clay which is a silicate of alumina producing a hydrolysis that brings about the formation of silicic acid and hydrate of alumina. Both these compounds, from the condition under which the hydrolysis takes place, can pass into the water in the colloidal form. Since there exists an incompatibility between colloidal silica and colloidal alumina, there only remains in the water the amount of silica in excess of that required for the precipitation of the alumina. The colloidal silica-alumina compound, which must on no account be confused with silicate of alumina, goes to form the deposit. Part of it, however, remains in suspension as a very finely divided colloid, and is the cause of the persistent opalescence often observed in the water drunk by sufferers from pellagra. The poisoning of silica would thus resolve itself into a mineral acidosis upon which would depend all the anatomical, pathological, and metabolic alterations which are met with in pellagra patients. Hence arose the other conclusion regarding pellagra—viz., that it is a disease due to the enforced retention of mineral salts followed by a liberation of acids which is excessive in comparison with the amount regarded as normal in the case of any given organism.

REVIEW.

A System of Veterinary Medicine. By Various Writers. Edited by E. Wallis Hoare, F.R.C.V.S. Vol. II. General Diseases, including a section on Parasites. Royal 8vo. Pp. xviij + 1623. (Bailliére, Tindall, & Cox, 8 Henrietta Street, Covent Garden, London. 1915.)

The second volume of this work is larger than the first—altogether, including the index, its matter exceeds 1600 pages. The two volumes complete thus amount to over 2900 pages; but it has not been found possible to include every subject usually dealt with under the heading of veterinary medicine. Diseases of the genito-urinary organs, and diseases of the skin are not included. The former omission is not serious—genito-urinary diseases belong more to surgery and obstetrics than to medicine. The latter is more regrettable; for, though parasitic skin diseases, with the exception of ringworm, are dealt with in the section on parasitology, some cutaneous affections which are of real importance in practice remain unnoticed.

Fewer collaborators have been engaged upon this book than upon the first volume; and several are only responsible for single articles. This means that the editor himself, sometimes alone and sometimes with a collaborator, has undertaken a greater share of this volume than of its predecessor—a welcome arrangement. Perhaps the best method of giving an idea of the work is to outline its general plan, without much detailed criticism.

The great bulk of the book is made up of separate sections dealing with the "general" diseases of the various organs or symptoms of organs in the horse, ox, sheep, goat, pig, dog, cat, and bird—each species being dealt with apart from the rest. This plan undoubtedly facilitates reference, and has the additional advantage of according separate consideration to some species of animals concerning which very little has hitherto been specially written in English text books. Then follow sections upon diseases of the blood, diseases of the ductless glands, diseases of metabolism, and four "diseases of doubtful etiology"—viz., Azoturia, Milk fever, Lymphangitis, and Rheumatism. Parasites and parasitic diseases, to which some 160 pages are allotted, come next; and then the work is completed by a very short section on poisons and an appendix on "Scrapie."

Nearly one-third of the book is devoted to diseases of the digestive system; and this, considering their preponderant importance in general practice, is fully justified. Generally speaking, with one almost inevitable exception, the apportionment of space is in very good proportion to the respective importance of the subjects. The one exception is poisons, which, if dealt with at all, really deserved far more than the dozen pages allotted. Toxicology is always an unsatisfactory feature in text-books of veterinary medicine—it can never be allowed space for its adequate presentation. Undoubtedly the subject is a medical one; but it would be better deleted from works on veterinary medicine, unless they can be specially enlarged for it.

All the writers are lucid, though not quite all are concise—one or two are certainly somewhat diffuse. Perhaps the individual writer most deserving of mention is Mr. Noël Pillers, who, despite difficulties of space, has dealt with the section on parasitology admirably. Possibly, however, the most informative portions of the book—which also happen to be among the most important ones to the practitioner—are some of the sections upon digestive and respiratory diseases in the chief veterinary patients; while some shorter sections upon obscure subjects, such as that by the editor upon diseases of the pancreas, are worth reading by any clinician. Taking the book as a whole, it is distinctly more useful to the practitioner than the first volume; and the two volumes together are well worth their somewhat high price. No such work on veterinary medicine has ever been produced by English writers; the absence of a good book on the subject has long been a reproach to our professional literature, and we must thank Mr. Hoare for removing it.

The Irish Draught Horse.

At the twenty-seventh meeting of the Council of Agriculture, held on Tuesday, 4th inst., in the Lecture Theatre of the Royal Dublin Society, Leinster House, Dublin, the following resolution was submitted by the Department for discussion:—

"That the Advisory Committee, after inspecting the Irish Draught Colts purchased by the Department, and having heard the report of the Inspector on those rejected, are of opinion that the scheme, with the materials available, is not likely to achieve the results hoped for, and recommend that the funds now spent on this scheme be, as soon as practicable, applied to the use of pure-bred sires."

Professor Campbell, Secretary in respect of the Agriculture, traced the history of the scheme, and of the work done in connection with it since its inception in 1903, when the first inspections were made, and when twelve half-bred sires out of 367 examined were selected for premiums fixed at £50. The report of the Advisory Committee, which was unfavourable, showed that the colts produced from sires subsidised under the scheme were not uniform in type, and tended to become common in quality. The fillies were better, but after careful consideration the Advisory Committee drew up the resolution submitted to the Council. He showed that the scheme had got every chance, and that if it had been tried a few generations ago it might have succeeded, as probably there was such a breed, as good as its advocates held, but after careful trial the Department felt that it was useless to go on with the scheme, and therefore offered the proposal for the consideration of the Council.—*The Farmers' Gazette.*

Fell Ponies.

A correspondent to *The Scottish Farmer* writes:—Owing to the death of Mr. R. Bellas, of Messrs. R. & J. Bellas, Moor Farm, Keswick, the largest stud of fell ponies in Lakeland was dispersed on Friday. There was an excellent sale, 50 head making an average of 20 gs., stallions bringing to 40 gs., brood mares to 37 gs., and young stock from 10 to 27 gs. The disposal of this stud, with a wide local reputation, calls attention to a breed that is decreasing on its native heath, for flockmasters, proud of their Herdwick sheep grudge grass for ponies. Yet from a national and military point of view, it ought to be preserved. Fast and wonderfully strong, a 14 hands fell pony will do more farm work than a cart horse three hands higher costing twice as much. Mated with a big thoroughbred, the fell pony will produce a cavalry charger of 15 hands, fast and hardy. Crossed with a Clydesdale, the result is a strong, active cob, suitable for artillery or transport. If Government studs are to be established after the war, then the cheap fell pony and the cheap fell land offer favourable opportunities for producing the right stamp of horse for the army. On the Prince of Wales' estate on Dartmoor, experiments are to be made with a view to breeding the old Devonshire pack horse for military purposes, and the example might be followed in Lakeland with the object of producing remounts with the strength, hardiness, and capacity for living on scanty fare that characterises the fell pony. There is something in mountain air and life productive of vitality and energy. Correspondents have testified that the Siberian ponies, rough-coated as bears, the horse of the Russian batteries, had been absolutely unaffected by the rigours of the Polish winter, and for the fell pony it may be claimed that he is quite as hardy. For he is hardier than the mountain sheep, and when the snow comes that covers the latter the pony by persistent scraping gets at the grass and keeps himself alive and well.

Coat-colour in animals.

At a recent meeting of the Royal Society, a paper by Dr. F. G. Hopkins, F.R.S., on "The Chemistry of Coat-colour in Animals" was read.

This research was undertaken in order to discover a chemical method of differentiating the two similar forms of white animals known as Dominant whites and Recessive whites, or albinos. Hitherto this has only been possible by observing their genetic behaviour.

Dark animal pigments are believed to result from the oxidation of a colourless chromogen by an oxydase. The skins of young black rabbits were found to yield a tyrosinase which converted tyrosine to a melanin. By means of this tyrosinase it was possible to test extracts from white rabbits of both types.

The results tend to confirm the Mendelian view that Dominant whiteness is caused by a factor which inhibits the pigment-producing mechanism if present, and that Albinism results from the partial or total absence of the factors necessary for the development of pigment. The experiments also suggest that the difference between pigments producing black, chocolate, and yellow hairs is quantitative rather than qualitative, for, after extraction, the pigments in all three colours appear identical.—*The Times.*

Hunting Memorial Fund.

Subscriptions received up to May 20th:—

Amount previously acknowledged	£368	7	0
Gladstone Mayall, Esq., M.R.C.V.S., 88 St. St. George's Road, Bolton		10	6
F. Morton Wallis, Esq., M.R.C.V.S., Halstead, Essex	1	1	0
	£369	18	6

Remittances by Cheque or Postal Order to be made payable to "The Hunting Memorial Fund," and crossed "London, City and Midland Bank, Ltd., Kensington Branch."

HENRY GRAY, M.R.C.V.S.
Hon. Treas. and Sec.
23 Upper Phillimore Place, London, W.

HOUSE OF COMMONS. May 17.

The Milk and Dairies (Consolidation) Bill was read a second time.

ARMY VETERINARY SERVICE

Extract from *London Gazette*,
WAR OFFICE, WHITEHALL, May 12.

REGULAR FORCES. ARMY VETERINARY CORPS.

T. H. Sherlock, T. F. O'Brien. Dated April 28.
W. Burt, S. H. Skelton. Dated May 1.
S. L. Symonds. Dated May 3.

May 19.

Lieut.-Colonel E. Taylor to be Colonel. Dated Jan. 20.
Major F. C. Stratton to be Lt.-Colonel. Dated Jan. 20.

May 17.

SPECIAL RESERVE OF OFFICERS.

To be Lieutenant (on probation):—
P. Howard. Dated May 10.

May 15.

OVERSEA CONTINGENTS.—CANADIAN.

Lieutenants to be temporary Captains:—
S. C. Richards, J. H. Brunet, F. G. Liddle, R. Waddy. Dated April 25.

May 14.

TERRITORIAL FORCE. ARMY VETERINARY CORPS.

To be Lieutenant:—W. Clarke. Dated April 23.

May 19.

Lieut. F. Hopkin to be temp. Captain. Dated April 13.

OBITUARY

DAVID FREW, M.R.C.V.S., Charlotte Lane, Edinburgh. Graduated, Glas: Dec. 1901.

JOHN LORD, Existing Registered Practitioner (retired), Farndon, Newark.

Mr. John Lord, 77, residing at Farndon, was on April 27 assisting his nephew to give a drink to a cow when a rope which secured the cow's head broke, and the animal became troublesome. Mr. Lord had his ankle hurt, but he did not call in a doctor until Friday, 7th inst., and died on Wednesday following. At the inquest death was stated to be due to blood poisoning and heart failure.

SHORTAGE OF VETERINARY SURGEONS FOR ACTIVE SERVICE.

The Pure Milk Bill and proposal to re-introduce the Tuberculosis Order in October, serve no doubt dangling baits to prevent a few from taking a commission. A man would probably be safe for his present appointment under the Order, by arrangement with the authorities, but what about new appointments under the Bill?

It is no use being too optimistic as regards equine practice after the war, as every village will have a sergeant or two of the A.V.C. fully imbued with their capabilities, in attending to sick and injured animals, and probably enjoying the confidence of the owners, owing to their experience during the great war.

Let the departments concerned issue a definite answer jointly, whether the Bill and Order will be put in force or not in October, or postponed for the duration of the war.

Another inducement that is of urgent necessity, which I have seen promulgated before, is to raise the rank of a V.S. on joining according to the number of years he has been serving his country in the capacity of a civilian veterinary surgeon or practitioner—for serving his country it undoubtedly is.

It may be a difficult matter for the officials to surmount the red tape of the War Office, but not a greater puzzle than it is for a young Infantry lieutenant to understand why a veterinary surgeon wearing both the King and Queen's South African colours, and obviously 40 years of age, still only wears two stars.

Men with 10, 20, or 30 years' experience have not just dropped trom the clouds, nor just scraped through with the skin of their teeth, and are certainly entitled out of respect for their age and experience to be adorned with as many stars as Officers of the same age in other branches of the service. A young fellow just leaving college is far different.

Fancy a man with 20 years' experience wearing only two stars, the same as a boy of twenty. WM. T. D. B.

SALVAGE IN FOOT-AND-MOUTH.

Sir,

I beg to thank you for publishing Melvin and Mohler's paper on Foot-and-Mouth Disease. It illustrates in a high degree the necessity for prompt and accurate action in dealing with this disease.

The authors have apparently been somewhat led astray as to the stamping out proceedure adopted in this country. They state, "Mettam, at the same Congress (International Veterinary Congress, 1914), gave his experience with the disease in Ireland, and stated that the animals, both infected and exposed, are slaughtered and their carcases burned or destroyed, without any attempt to salvage any portion of the animal, owing to the danger of spreading the virus far and wide." Now the fact is that it has been the practice in Ireland to salvage all healthy and in-contact animals which are salvageable, both as regards hides and carcases. No less a sum than £7,316 16s. 10d. being realised by the sale of carcases in the 1912 outbreak.—Yours faithfully, J. H. NORRIS.

[The mention of the "experience" of Prof. Mettam will not mislead our readers, who know that the control of animal diseases is the duty of the veterinary staff of the Board of Agriculture—not of the Dublin Veterinary College.]

Pay of Territorial Medical Officers.

In the House of Commons on April 22nd, in a discussion on the Army Estimates, Colonel Greig specifically raised the question of the pay of Territorial and Regular Medical Officers. He said: There is one case which I venture to bring before the notice of the right hon. gentlemen, the Under Secretary and the Financial Secretary, and that is the case of the medical officers of the Territorial regiments. A large number of these appointments of medical officers have been filled by professional men who have given up large practices in order to fill the vacancies caused by the large expansion of that force. In many cases they are men who have sacrificed a professional career to the needs of the country. There is a considerable dearth even now of applicants for the posts, mainly, I believe, because of the inequality of treatment which they are receiving from the country as compared with their professional brethren, to whom, of course, we are very much indebted for their medical services. As between the two, however, the Territorial medical officer seems to be treated very badly. His period of service when he joins, for there is no limit, is as long as the authorities like to keep him. His pay is 14s. per diem, *plus* certain allowances. The highest possible amount he can get is 18s. 10d. per diem. When he starts his work he gets an outfit allowance of £30, and a camp outfit allowance of £7 10s., which every one who knows about these matters is perfectly well aware does not cover the camp outfit cost. He gets no gratuity at the end of his service.

There are many cases of pupils who have been trained by present members of the Territorial Medical Corps, and when these Territorial medical officers meet their old-time pupils in camp they find their pupils in higher ranks, and receiving a very much higher rate of pay. The thing is an absurdity! The two sets of men are doing exactly the same work. Of course, the Territorial medical officers in a large number of cases have taken the Imperial Service obligation. No other distinction can be indicated between the two sets.

The period of service for the R.A.M.C. officers is twelve calendar months, or until their service is no longer required, which presumably will be when the war has terminated. The pay is 24s. per diem, being a flat rate with no allowances. Travelling on duty is also paid for by the Government. This officer gets an outfit allowance of £30 at the time of his service, the same as the Territorial medical officer, but at the end of his service he gets £60.

Mr. Falle also referred to the question of Territorial Medical officers. He said: If Territorial majors are attached to any unit but the medical unit the cannot be promoted to lieutenant-colonel. When I say "cannot," I mean that it has been done, but it is very unusual. I know one who has been attached to a Territorial regiment more than twenty years, and he has gone through all the grades and passed through all the ranks, but he is now told that he cannot be promoted above the rank of major. That does not seem to me to be fair, considering that new-comers are promptly made lieutenant-colonels and receive pay superior to the men who have been over twenty years with their regiments.

The following occurs in a leading article in *The Lancet* of May 8:—

"The call on the patriotism of the medical men who are now asked to join the army is indeed very great. The higher posts have been filled and a waiting list has been established behind their present occupants. What is required is medical men to join the army regardless of their civilian position and experience, in subordinate positions, and, as a rule, with great sacrifice of income. The

War Office cannot offer such men any commensurate return whatever; neither rank nor pay nor facilities for clinical research can often be based upon the special attainments or equipment of any medical man accepting a commission. We feel safe in saying that a man who possesses special qualifications in some direction will in the course of internal administration be, when practicable, placed where he seems to be exceptionally fitted. A skilled operator may be sure that as soon as opportunity serves he will be doing the operating surgery in his district, and a specialist will quickly find his particular services in demand. But at the beginning the War Office finds itself unable to go into individual claims."

The following list of consulting surgeons and physicians at present employed in the Army Medical Service abroad and at home, with the rates of pay, appeared in *The British Medical Journal* of May 8:—

TEMPORARY COLONELS.

Consulting Surgeons (Abroad).

Sir G. H. Makins, K.C.B., F.R.C.S.; Sir A. A. Bowlby, Kt., C.M.G., F.R.C.S.; F. F. Burghard, M.D., F.R.C.S; W. T. Lister, M.B., F.R.C.S.; H. M. W. Gray, M.B., F.R.C.S.

Consulting Physicians (Abroad).

Sir W. P. Herringham, Kt., M.D.; Sir. A. E. Wright, Kt., M.D., F.R.C.S.I., F.R.S.; Sir. J. R. Bradford, K.C.M.G., C.B., F.R.S., M.D.; Sir B. E. Dawson, K.C.V.O., M.D.

TEMPORARY LIEUTENANT COLONELS.

Consulting Surgeons (At Home).

A. E. J. Barker, F.R.C.S.; Sir T. Myles, Kt., M.D., F.R.C.S.I.; Sir C. B. Ball, Bt., M.D, F.R.C.S.I.; Sir W. A. Lane, Bt., M.B., F.R.C.S.; Sir F. S. Eve, Kt., F.R.C.S.; J. Swain, M.D., F.R.C.S.

Pay	Colonel	£2	5	0	Lt.-Col.	£1	10	0
Servant allowance	,,		1	0	,,		1	0
Field allowance*	,,		7	6	,,		6	0
Lodging allowance†	,,		5	6	,,		4	6
Fuel & light allowance:								
Winter (Oct.-May)	,,		2	1	,,		1	9
Summer (June-Sep.)	,,		1	0	,,			10
Ration allowance‡	,,		1	9	,,		1	9

* Issuable only when under canvas or when accommodated in temporary war shelters.

† Issuable only when not provided with public quarters and fuel and light in kind or field allowance.

‡ Issuable when rations are not issued in kind.

NOTE.—The above rates are those issued at home, but when serving in France field allowance is issued concurrently with lodging, fuel and light allowance.

[The foregoing notes are illustrative of the question of the differential treatment of the officers of the Territorial Force in the matter of pay and allowances. It will be seen that the medical profession are bringing pressure to bear, and their influence—numerically and financially—and therefore politically—may be placed at ten times that of the veterinary profession.]

The A.V.C. Comforts Fund.

Collection for Mrs. Moore's Fund per Mrs. Mettam, R.V.C.I., Dublin.

Previously acknowledged	£125	19	0
Proceeds of Concert organised by J. Ewing Johnston, M.R.C.V.S., Belfast	200	0	0
Total of the Fund £730 16s. 6d.	£325	19	0

J. Ewing Johnston, M.R.C.V.S., Belfast: 17 pairs socks, 11 mufflers, 5 pairs mits, 6 helmets, 2 pair cuffs, 1 sleeveless jersey, 1 pair gloves

Mr. R. Gorman, Class B Student, R.V.C.I., Dublin: 3 pairs socks, 3 body belts

Prof. G. T. Dunne, F.R.C.V.S., R.V.C.I., Dublin: 24 pks. playing cards

Mrs. J. F. Craig, Dublin: 3 pairs socks

T. H. Browne, M.R.C.V.S., Glasgow: 3 helmets, 3 mufflers, 3 pairs socks, 3 pairs mits.

Mrs. Allen Baker, Bansha, Co. Tipperary: 4 mufflers, 1 body belt.

May 18.

Cruelty Charge.—Liability of Insurance Co.

At Swansea County Police Court, on Wednesday, April 14, John James and Gwilym James, brothers, carrying on business as confectioners at Llanelly and Gorseinon, and the Legal Insurance Co., London, were jointly charged with cruelty to a mare, by causing it unnecessary suffering on March 3. Mr. St. John Francis Williams (instructed by Mr. S. G. Polhill, solicitor, London), appeared for the R.S.P.C.A., who prosecuted, and Mr. W. Davies, Llanelly, defended.

In opening, counsel said that on the evening of March 3, about 9.30, Mr. Gwilym James was driving the mare through Gorseinon, when the mare slipped and cut both her knees so badly that it was impossible to drive her any further, and she was taken to the stables of a Mr. Harries, in Gorseinon. On the 4th, Mr. J. James, one of the defendants, went to the stable with Mr. Evans, a veterinary surgeon, and Mr. Harries.

Mr. Evans then told defendant that the mare was so badly damaged that she must be destroyed in order to put her out of her suffering. The mare was insured with the defendant company for £40, and Mr. James thought it would be unwise to kill the animal, although she was suffering so badly, before communicating with the company.

Eventually, on the 13th, ten days after the accident, it was reported to the police. On the 15th the mare was killed, after it had suffered "most hideous torture."

Samuel Harries, Masons' Road, Gorseinon, bore out counsel's statement. He said the mare's knees were badly damaged. He offered to put the horse in a spare stable. On the next day he saw both the brother defendants with a veterinary surgeon, who expressed doubt as to whether the horse could be cured.

On the 7th witness was surprised to find the mare alive, and he asked the Jameses whether the horse should not be destroyed. They replied that they were taking no risks with the Insurance Co. On the 13th he again saw the mare in the stable, and she had a lump under the chin, caused by placing her head on the manger to relieve the pain in the knees.

Mr. John Evans, veterinary surgeon, Llanelly, who examined the mare on March 3, said she began to suffer great pain after five or six days, owing to the infection of the wound. He sent a certificate on the 7th March to the Legal Insurance Co., and on the 10th, finding that nothing had been done, communicated with the police.

Inspector Lindsay, R.S.P.C.A., said he saw Mr. Redaway, the Swansea representative of the Legal Insurance Company, who said that if the veterinary surgeon had advised that the animal should be destroyed that advice should have been followed.

J. Howell James, one of the defendants, was called, and he said that as far as he was aware he did everything possible to relieve the animal of all pain and suffering. He was prepared to go to any expense in the matter.

Cross-examined: witness said that it was on the 7th he discovered the animal was in pain. Although he had the veterinary surgeon's certificate on the 7th, he did not have the animal killed. This was because he had not had the defendant company's permission to do so.

Mr. Davies characterised the affair as a sad business throughout. The defendant James, immediately he found the animal to be suffering, called in the best party he could—a veterinary surgeon. He did all he could for the mare, had her wounds dressed, and had two men to attend to her daily. Speaking for the defendant company, Mr. Davies contended that the Legal Insurance Company were not liable, because the animal was in no way under their control.

Counsel for the prosecution contended that the question for the Bench to decide was whether the defendant company did procure the delay. The attitude adopted by them clearly demonstrated that.

The Bench retired to consider their decision.

The Chairman, on the return to court, announced that the Bench had decided to convict. John and Gwilym James be fined £5 each, and the Legal Insurance Company would be mulcted in the same amount, with costs in each case.

Mr. Davies said the Bench's decision was an important one for the insurance company, and the latter would probably consider their position with a view to an appeal. He asked the Bench to state a case. The magistrates agreed to do so.

At the conclusion of the court the chairman (Mr. A. H. Thomas) warmly complimented Mr. W. Davies on his fair and excellent conduct of the case. The other magistrates concurred.—*The Cambria Daily Leader.*

Cruelty Charge at Harwich.—Dismissed.

At Harwich Petty Sessions, on Tuesday, 12th ult., before the Mayor, Mr. E. Saunders, Mr. W. F. Gray, Mr. J. T. Bentley, and Mr. J. Paterson, John Ranson, farmer, was summoned for causing a horse to be worked in an unfit state.

Inspector Dooner, R.S.P.C.A., deposed that about noon on March 26th, he was near Dovercourt Railway Station, when he saw a grey pony drawing a cart laden with carrots. The animal was going lame, and he found that the pony was aged and in poor bodily condition. It was very lame on the near fore leg, suffering from contracted tendons, which were inflamed. On the top of the withers there was a bleeding wound about the size of a two-shilling piece, and the padding on top of the collar was wet with blood. As the animal was unfit for work and in pain, he ordered it to be removed from the cart. When he called on defendant Ranson he said he had had the pony about ten years; he knew it was very stiff, but he would not send it to work again, adding, "It shall be shot."

Defendant said the pony was an old favourite of his wife and daughters. It always had been a cripple and went stiff. He thought it was quite fit when it went out in the morning.

Ernest Stopes, 15, in the employ of the defendant, said the pony got stiff whilst standing against the truck.

After the Magistrates had inspected the animal, which the defendant had brought to the Guildhall, the Mayor announced that the case would be dismissed; the Magistrates did not consider that defendant was conversant with the fact that the pony had a sore; moreover the sore did not have the appearance of being a deep-seated one.—*Harwich and Dovercourt Newsman.*

DISEASES OF ANIMALS ACTS 1894 TO 1914, SUMMARY OF RETURNS.

Period.	Anthrax		Foot-and-Mouth Disease.		Glanders.†		Parasitic Mange. ‡		Sheep Scab.	Swine Fever.	
	Out-breaks (a)	Animals.	Out-breaks (a)	Animals.	Out-breaks (b)	Animals.	Out-breaks (b)	Animals.	(b)	Out-breaks (a)	Slaughtered. *
Gr. BRITAIN. Week ended May 15	12	14					30	56	3	108	392
Corresponding week in 1914 ...	12	14			4	5	37	59	2	146	1546
Corresponding week in 1913 ...	11	11			3	4	43	77	3	51	724
Corresponding week in 1912 ...	11	14			2	4	29	55		79	805
Total for 20 weeks, 1915	312	347			11	16	‡279	‡640	151	1598	6947
Corresponding period in 1914 ...	368	394	11	74	39	86	1210	2170	142	1526	15640
Corresponding period in 1913 ...	262	284			67	212	1393	2879	117	877	12619
Corresponding period in 1912 ...	435	489			67	145	1877	4207	159	1341	16860

‡ The Parasitic Mange Order of 1911 was suspended from 6th August, 1914, to 27th March, 1915, inclusive.

(a) Confirmed. (b) Reported by Local Authorities. † Counties affected, animals attacked:

Board of Agriculture and Fisheries, May 18, 1915 ‡ Figures for three weeks only.

IRELAND. Week ended May 15	...	...	...	...	...	...	Outbreaks 1	4	8	41
Corresponding Week in 1914 ...	...	...	3	43	...	...	1	2	...	13
Corresponding Week in 1913 ...	...	...	...	...	...	...	1	11	1	3
Corresponding Week in 1912 ...	1	1	...	...	...	...	...	2	6	74
Total for 20 weeks, 1915 ...	1	1	...	...	1	3	18	230	116	700
Corresponding period in 1914 ...	1	1	73	935	...	...	41	324	98	456
Corresponding period in 1913 ...	...	...	...	...	...	...	33	278	62	381
Corresponding period in 1912 ...	2	2	...	...	...	...	37	249	104	1002

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, May 17, 1915

NOTE.—The figures for the Current Year are approximate only. * As Diseased or Exposed to Infection